

CLAIMS

1. A method for detecting Paget disease of bone by associating Paget disease of bone with the mutation of a gene coding a chondroitin synthase gene or the amount of expression of said gene.
2. The method for detecting Paget disease of bone according to claim 1, wherein the chondroitin synthase is a glycosyltransferase having activity for transferring a D-glucuronic acid residue or an N-acetyl-D-galactosamine residue to the saccharide residue at the non-reducing terminal of chondroitin.
3. The method for detecting Paget disease of bone according to claim 1 or 2, wherein the chondroitin synthase is a glycosyltransferase by means of which a xylose residue linked to an amino acid residue has D-galactose linked thereto by a β 1,4-glycoside linkage.
4. The method for detecting Paget disease of bone according to claim 1, wherein the chondroitin synthase gene is a gene comprising the nucleotide sequence depicted in any one of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 65, SEQ ID NO: 67 or SEQ ID NO: 69.
5. A knockout animal wherein a glycosyltransferase gene comprising the amino acid sequence depicted in any one of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 66, SEQ ID NO: 68 or SEQ ID NO: 70 or any one of the amino acid sequences homologous thereto is partly or completely suppressed in expression.